

CLAIMS

1. Method for providing a call response function in a communication network which includes a response server, having a storing means, the method comprising the steps of:

a) providing, in a terminal of a user, a media message which includes response content;

b) transmitting the media message from the terminal to the response server;
and

c) storing the response content of the media message in the storing means of the response server.

2. Method according to claim 1, further comprising the steps of:

d) forwarding one of a call and a session request from another terminal directed to the user of the terminal, to the response server; and

e) playing one of the response content and a part of the response content as a voice mail announcement to the another terminal.

3. Method according to claim 1, wherein the step of providing the media message comprises providing a Multimedia Messaging Service (MMS) message.

4. Method according to claim 1, wherein the step of providing the media message comprises providing a Session Initiation Protocol (SIP) message.

5. Method according to claim 1, further comprising the steps of:

forwarding one of a call and a session request from another terminal directed to the user of terminal to the server, and

transmitting one of the stored response content and a part of the stored response content to the another terminal in a response media message.

6. Method according to claim 1, further comprising the steps of:

forwarding one of a call and a session request from another terminal directed to the user of terminal to the server;

checking a media capability of the another terminal ; and

transmitting one of the stored response content and a part of the stored response content to the another terminal in a response media message when detecting that the another terminal has media capability.

7. Method according to claim 5, wherein one of the stored response content and the part of the stored response content is additionally played to the another terminal as a voice mail announcement.

8. Method according to claim 5, wherein the transmitted response content includes at least one of audio content, a picture and a video clip.

9. Method according to claim 5, wherein the step of transmitting one of the stored response content and the part of the stored response content in the response media message comprises transmitting one of a Multimedia Messaging Service (MMS) message and a Session Initiation Protocol (SIP) message.

10. Method according to claim 1, wherein the step of transmitting the media message comprises transmitting application specific content.

11. Method according to claim 10, wherein the application specific content is used to program a call response.

12. Method according to claim 11, wherein the application specific content includes information for authentication of a sender of the media message.

13. Method according to claim 12, further comprising checking the information before authorizing programming of the call response.

14. Method according to claim 12, wherein the information comprises at least a Personal Identification Number (PIN) code for authentication and authorization.

15. Method according to claim 10, wherein the application specific content includes at least one parameter of:

- a time of a call;
- control information for network provided information / assisted operation;
- different messages based on callee's location; and
- a validity time of the instructions;

wherein the parameters allow different responses to be one of played to different callers and played at different calling times.

16. Method according to claim 1, further comprising:

providing several different media messages, with different audio contents, in the terminal;

selecting at least one of the provided media messages; and

transmitting and processing the at least one selected media messages.

17. Method according to claim 1, wherein the media message comprises caller identification information, and the method further comprises

storing the response content of the media message in the storing means of the server, and associating the response content with the user of the terminal and with caller identification information.

18. Method according to claim 1, further comprising storing at least two response contents associated with the same user of the terminal and to different caller identification information on the server.

19. Method according to claim 2, wherein , when the one of the call and the session request of another terminal directed to the user of the terminal is forwarded to the server, the server detects a caller identification information of the caller, and one of plays the stored response content to the another terminal, and responds with a media message comprising the stored response content, and wherein the response content is associated with the user of the terminal and with detected caller identification information corresponding to the caller.

20. Method according to claim 1, wherein the step of providing the media

message in the terminal comprises providing the media message in a mobile terminal.

21. Method according to any one of the preceding claims, wherein the server is implemented in a Multimedia Messaging Service (MMS) center (MMSC).

22. System for providing a call response function, in a communication network which includes a response server, having a storing means, comprising:

a) a terminal configured to provide a media message which includes response content; and

b) transmitting means for transmitting the media message from the terminal to the server;

wherein the system is configured to store the response content of the media message in the storing means of the server.

23. System according to claim 22, wherein the system is configured to play one of the response content and a part of the response content to another terminal as a voice mail announcement when one of a call and a session request of the another terminal directed to the terminal is forwarded to the server.

24. System according to claim 23, further comprising:

means for transmitting one of the stored response content and at least part of the stored response content in a new media message to the another terminal.

25. System according to claim 23, further comprising:

means for checking a media capability of the another terminal; and

means for transmitting one of the stored response content and at least part of the stored response content in a new media message to the another terminal when the means for checking determines that the another terminal has media capability.

26. System according to claim 22, wherein

several different media messages, including Multimedia Messaging Service (MMS) messages with different response contents, are provided in the terminal,

at least one of the provided media messages are selected by the terminal, and

the at least one of the selected media message are transmitted and processed in the server.

27. System according to claim 22, wherein the media message includes caller identification information indicating a caller of one of a call and a session forwarded to the server, and

wherein the storing means stores the response content of the media message in the storing means of the server associated with the terminal and with the caller identification information.

28. System according to claim 22, wherein the server stores at least two response contents associated with a same terminal or a same user of the same terminal, and with different caller identification information.

29. System according to claim 22, wherein the server is configured to detect,

when a call or a session request of another terminal directed to the terminal is forwarded to the server, caller identification information indicating a caller of the call or the session forwarded to the server, and to play or transmit, to the another terminal, the stored response content which is associated with the terminal and with the detected caller identification information.

30. System according to claim 22, wherein the media message sent to the server includes application specific content.

31. System according to claim 30, wherein the server comprises means for removing the application specific content before storing the response content of the media message.

32. System according to claim 30, wherein the application specific content includes authentication information indicating authentication of a sender of the media message to program a call response.

33. System according to claim 32, wherein the authentication information comprises at least a Personal Identification Number (PIN) code.

34. System according to claim 32, wherein the authentication information is checked before programming the call response.

35. System according to claim 30, wherein the application specific content includes at least one parameter of:

- a time of a call;
- control information for network provided information / assisted operation;
- different messages based on callee's location; and
- a validity time of the instructions;

wherein the parameters allow different responses to be played to different callers and at different calling times.

36. System according to claim 22, wherein the terminal is a mobile terminal.

37. System according to claim 22, wherein the server is implemented in a Multimedia Messaging Service (MMS) center (MMSC).

38. Automatic call response server, comprising:

a storing means; and

means for receiving, from a terminal, a media message which includes response content;

wherein the response server is configured to process the media message to derive the response content, and to store the derived response content of the media message in the storing means of the response server.

39. Server according to claim 38, wherein the server is configured to play, when one of a call and a session request of another terminal directed to the terminal is forwarded to the server, one of the response content and at least a part of the response content to the another terminal as a voice mail announcement.

40. Server according to claim 39, further comprising
means for generating and transmitting the media message comprising one of the stored response content and at least a part of the response content to the another terminal.

41. Server according to claim 39, further comprising
means for checking a media capability of the another terminal, and
means for generating and transmitting the media message comprising one of the stored response content and at least a part of the response content to the another terminal when means for checking detects that the another terminal has media capability.

42. Server according to any one of claims 38, wherein the media message sent to the server includes application specific content, and the server further comprises means for processing the application specific content, and means for removing the application specific content before storing the response content of the media message.

43. Server according to claim 38, wherein the server is implemented in a Multimedia Messaging Service (MMS) center (MMSC).

44. Server according to claim 38, wherein the media message includes caller identification information indicating one of a caller of a call and a session directed to the server, and

wherein the server is configured to store the response content of the media message in the storing means of the server associated with the caller identification information.

45. Server according to claim 38, wherein the server is configured to store at least two response contents associated to a same terminal, or a user of the same terminal, and to different caller identification information.

46. Server according to claim 38, wherein the server is configured to detect, when one of a call and a session request of another terminal directed to the terminal is forwarded to the server, a caller identification information indicating a caller of one of a call and the session forwarded to the server, and to transmit or play, to the another terminal, the stored response content which is associated with the terminal and with the detected caller identification information.

47. Terminal comprising:

input means; and

preparing means for preparing a programming media message for programming an automatic call response server, the programming media message including response content which is to be stored in the automatic call response server.

48. Terminal according to claim 47, wherein the preparing means is configured to prepare a Multimedia Messaging Service (MMS) message or a

Session Initiation Protocol (SIP) message.

49. Terminal according to claim 47, wherein the programming media message is prepared to include application specific content.

50. Terminal according to claim 49, wherein the application specific content includes information indicating authorization of the terminal to program the call response server.

51. Terminal according to claim 50, wherein the information comprises at least a Personal Identification Number (PIN) code.

52. Terminal according to claim 47, wherein the preparing means is configured to prepare a programming media message comprises caller identification information indicating a caller one of a call and a session directed to the server.

53. Terminal according to claim 47, wherein the means for preparing the programming media message comprises an application in the terminal for creating media messages, the application handling messaging with the call response server.

54. Terminal according to claim 53, wherein the application is configured to assist a user in creation of programming media messages.

55. Terminal according to claim 54, wherein the application provides assistance in a form of pre-defined or user modifiable forms displayed to the user for filling in.

56. Terminal according to claim 53, wherein the application is configured to use a storage within the terminal for storing a library of previously created or pre-defined programming media messages.

57. Terminal according to any one of claims 53, wherein the application is configured to store information on at least one of a status of the automatic call response service and a history of the automatic call response service.

58. Computer program, embodied in a computer-readable medium, configured to be installed in a terminal and configured to create programming media messages for programming a call response server.

59. Computer program according to claim 58, wherein the computer program is an application configured to handle messaging with the call response server.

60. Computer program according to claim 58, wherein the application is configured to assist a user in creation of programming media messages.

61. Computer program according to claim 60, wherein the application is configured to provide assistance in a form of pre-defined or user modifiable forms displayed to the user for filling in.

62. Computer program according to claim 59, wherein the application is configured to use a storage within the terminal for storing a library of previously created or pre-defined programming media messages.

63. Computer program according to any one of claims 59, wherein the application is configured to store information on at least one of a status of the automatic call response service and a history of the automatic call response service.